UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,238	08/31/2001	Shrjie Tzeng	023925-00014	1315

32294 7590 07/27/2005

SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER	
BHANDARI, PUNEET	

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,238	TZENG, SHRJIE	
	Examiner	Art Unit	
	Puneet Bhandari	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,11 and 16* is/are rejected.

7)☒ Claim(s) *2-10, 12-15 & 17-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/29/04,08/31/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims **1, 11 and 16** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 14 and 23 respectively of copending Application No.09/920944. Although the conflicting claims are not identical, they are not patentably distinct from each other because of following correspondences

Regarding claim **1**, a network device having plurality of ports corresponds to *"network device having a plurality of ports for switching data packets between network ports of said plurality of ports"* disclosed in claim 1, lines 1-3 of copending Application No.09/920944;

The limitation address resolution logic (ARL) configured to perform address resolution of data packets received at ports of said plurality of ports and to switch data packets from a first network port of said plurality of ports to a second network port of

said plurality of ports corresponds to *"address resolution logic (ARL) configured to perform address resolution of data packets received at ports of said plurality of ports and to switch data packets from a first network port of said plurality of ports to a second network port of said plurality of ports"* disclosed in claim 2, lines 1-5 of copending Application No.09/920944;

The limitation a first switch having a first group of ports which are subset of said plurality of ports and are numbered by a first numbering scheme, a first rate control logic for performing rate control function related to switching data packets between said network ports, and a first local communication channel for transmitting messages between said first group of ports and said rate control logic, said first switch being configured to generate rate control messages based on data packet traffic to said first group of ports corresponds to *"a first switch having a first group of ports which are subset of said plurality of ports and are numbered by a first numbering scheme, a first rate control logic for performing rate control function related to switching data packets between said network ports, and a first local communication channel for transmitting messages between said first group of ports and said rate control logic, said first switch being configured to generate rate control messages based on data packet traffic to said first group of ports"* disclosed in claim 1, lines 4-10 of copending Application No.09/920944;

The limitation a second switch having a second group of ports which are a subset of said plurality of ports and are numbered by a second numbering scheme different from said first numbering scheme, a second rate control logic for performing rate control

functions related to switching data packets between said network ports, and a second local communication channel for transmitting messages between said group of ports and second rate control logic, said second switch being configured to generate rate control messages based on data packet traffic to said second group of ports corresponds to "*a second switch having a second group of ports which are a subset of said plurality of ports and are numbered by a second numbering scheme different from said first numbering scheme, a second rate control logic for performing rate control functions related to switching data packets between said network ports, and a second local communication channel for transmitting messages between said group of ports and second rate control logic, said second switch being configured to generate rate control messages based on data packet traffic to said second group of ports*" disclosed in claim 1, lines 10-18 of copending Application No.09/920944;

The limitation a CPU coupled to said first switch and said second switch and configured to control said first and second switch corresponds to *"a CPU coupled to said first switch and said second switch and configured to control said first and second switch"* disclosed in claim 1, lines 19-20 of copending Application No.09/920944;

The limitation a first link port of said first group of ports is coupled to a second link port of said second group of ports corresponds to "a first link port of said first group of ports is coupled to a second link port of said second group of ports" disclosed in claim 1, lines 21-22 of copending Application No.09/920944;

The limitation wherein said ARL is configured to perform address resolution based on said first numbering scheme and said second numbering scheme

corresponds to "*address resolution logic (ARL) configured to perform address resolution based on said first and second numbering schemes"* disclosed in claim 2, lines 4-5 of copending Application No.09/920944;

The limitation first link port is configured to generate a local rate control message to said first local communication channel, and said first switch is configured to perform rate control function related to said second switch based on said local rate control message corresponds to *"said first and second link port are configured to relay said rate control messages to each other"* disclosed in claim 1, lines 22-23 of copending Application No.09/920944;

Claim 1 differ from the claim 2 of the copending application for following reasons, claim 1 does not claim data packet received at said first network port destined for said network port is directly routed from said first network port to said second network port". Therefore claim 1 merely broadens the scope of claim 2 of copending Application No.09/920944.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlosn, 136 USPQ 184 (CCPA). Also not Ex parte Rainu,168 USPQ 375 (Bd. App.1969). The omission of reference element whose function is not needed would have been obvious to one skilled in art.

Regarding claim **11**, a method for communication of rate control messages between two switches corresponds to "method for communication of rate control

messages between a plurality of switches" disclosed in claim 14, line 1-2 of copending Application No.09/920944.

The limitation designating a first plurality of ports of a first switch by a first numbering scheme corresponds to "designating a first plurality of ports of a first switch by a first numbering scheme" disclosed in claim 14, lines 3-4 of copending Application No.09/920944.

The limitation designating second plurality of ports of a second switch by a second numbering scheme corresponds to "*designating a second plurality of ports of a second switch by a second numbering scheme which is different from the said first numbering scheme"* disclosed in claim 14, lines 5-6 of copending Application No.09/920944.

The limitation coupling a first link port of said first plurality of ports to a second link port of said second plurality of ports corresponds to *"coupling a first link port of said first plurality of ports to a second link port of said second plurality of ports"* disclosed in claim 14, lines 7-8 of copending Application No.09/920944.

The limitation configuring said first switch to generate a first rate control message at said first switch and relay said first rate control message to a first local communication channel of said first switch corresponds to "configuring said first switch to generate a rate control message and to relaying said rate control message to said first link port" disclosed in claim 14, lines 9-10 of copending Application No.09/920944.

The limitation configuring said first switch to perform a rate control function (*Mac control frame based on said rate control message*) related to said second switch based

on said first rate control message corresponds to "*configuring said first link port to generate a Mac control frame based on said rate control message and relay said MAC control frame to said second link port*" disclosed in claim 14, lines 11-12 of copending Application No.09/920944.

Claim 11 differ from the claim 14 of the copending application for following reasons, claim 11 does not claim generating a MAC control frame based on said rate control message. Therefore claim 11 merely broadens the scope of claim 14 of copending Application No.09/920944.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlosn, 136 USPQ 184 (CCPA). Also not Ex parte Rainu,168 USPQ 375 (Bd. App.1969). The omission of reference element whose function is not needed would have been obvious to one skilled in art

Regarding claim **16**, a network device having plurality of ports corresponds to *"network device having a plurality of ports for switching data packets between network ports of said plurality of ports"* disclosed in claim 1, lines 1-3 of copending Application No.09/920944;

The limitation address resolution logic (ARL) means for performing address resolution of data packets received at ports of said plurality of ports and to switch data packets from a first network port of said plurality of ports to a second network port of said plurality of ports corresponds to *"address resolution logic (ARL) means configured to perform address resolution of data packets received at ports of said plurality of ports*

and to switch data packets from a first network port of said plurality of ports to a second network port of said plurality of ports" disclosed in claim 25, lines 1-5 of copending Application No.09/920944;

The limitation a first switch means having a first group of ports which are subset of said plurality of ports and are numbered by a first numbering scheme, a first rate control logic for performing rate control function related to switching data packets between said network ports, and a first local communication channel for transmitting messages between said first group of ports and said rate control logic, said first switch being configured to generate rate control messages based on data packet traffic to said first group of ports corresponds to "*a first switch having a first group of ports which are subset of said plurality of ports and are numbered by a first numbering scheme, a first rate control logic for performing rate control function related to switching data packets between said network ports, and a first local communication channel for transmitting messages between said first group of ports and said rate control logic, said first switch being configured to generate rate control messages based on data packet traffic to said first group of ports"* disclosed in claim 24, lines 4-10 of copending Application No.09/920944;

The limitation a second switch means having a second group of ports which are a subset of said plurality of ports and are numbered by a second numbering scheme different from said first numbering scheme, a second rate control logic for performing rate control functions related to switching data packets between said network ports, and a second local communication channel for transmitting messages between said group

of ports and second rate control logic, said second switch being configured to generate rate control messages based on data packet traffic to said second group of ports corresponds to "*a second switch having a second group of ports which are a subset of said plurality of ports and are numbered by a second numbering scheme different from said first numbering scheme, a second rate control logic for performing rate control functions related to switching data packets between said network ports, and a second local communication channel for transmitting messages between said group of ports and second rate control logic, said second switch being configured to generate rate control messages based on data packet traffic to said second group of ports*" disclosed in claim 24, lines 10-18 of copending Application No.09/920944;

The limitation a processor means coupled to said first switch and said second switch and configured to control said first and second switch corresponds to *"a processor coupled to said first switch and said second switch and configured to control said first and second switch"* disclosed in claim 24, lines 19-20 of copending Application No.09/920944;

The limitation a first link port of said first group of ports is coupled to a second link port of said second group of ports corresponds to "a first link port of said first group of ports is coupled to a second link port of said second group of ports" disclosed in claim 24, lines 21-22 of copending Application No.09/920944;

The limitation wherein said ARL is configured to perform address resolution based on said first numbering scheme and said second numbering scheme corresponds to "*address resolution logic (ARL) configured to perform address resolution*

based on said first and second numbering schemes" disclosed in claim 25, lines 4-5 of copending Application No.09/920944;

The limitation first link port is configured to generate a local rate control message to said first local communication channel, and said first switch is configured to perform rate control function related to said second switch based on said local rate control message corresponds to *"said first and second link port are configured to relay said rate control messages to each other"* disclosed in claim 24, lines 22-23 of copending Application No.09/920944;

Claim 16 differ from the claim 24 of the copending application for following reasons, claim 16 does not claim data packet received at said first network port destined for said network port is directly routed from said first network port to said second network port". Therefore claim 16 merely broadens the scope of claim 24 of copending Application No.09/920944.

It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See In re Karlosn, 136 USPQ 184 (CCPA). Also not Ex parte Rainu,168 USPQ 375 (Bd. App.1969). The omission of reference element whose function is not needed would have been obvious to one skilled in art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

3. Claims **1-23**, would be allowable upon Applicant overcoming the obviousness type double patenting rejection provided above.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **1 and 16,** prior art of record fails to teach a network device having a plurality of ports for switching data packets between network ports of said plurality of ports, said network device comprising: a first switch having a first group of ports which are subset of said plurality of ports numbered by a first numbering scheme, a second switch having second group of ports which are subset of said plurality of ports and are numbered by second numbering scheme, a CPU coupled to said first switch and said second switch coupled; and wherein a first link port of said group of ports is coupled to a second link port of said second group of ports, and said first link port and second link port are configured to relay said rate control messages to each other; an address logic configured to perform address resolution of the data packets received at said network ports of said plurality of ports and to switch data packets from the first network port of said plurality of ports to a second network port of said plurality of ports.

Regarding claims **2-10**,since these claims are further limiting claim 1. Hence are allowable over prior art of record.

Regarding claims **17-23**, since these claims are further limiting claim 16. Hence are allowable over prior art of record.

Regarding claim **11**, prior art of record fails to teach method of communication of rate control messages between plurality of switches, said method comprising the steps of designating a first switch having a first group of ports which are subset of said plurality of ports numbered by a first numbering scheme, a second switch having second group of ports which are subset of said plurality of ports and are numbered by second numbering scheme which is different from the first numbering scheme, coupling a first link port of said plurality of ports to a second link port of said second plurality of ports.

Regarding claims **12-15**, since these claims are further limiting claim 11. Hence are allowable over prior art of record.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mangin et al. (US 6,704,280), Deyer et al. (US 6,098,103), Kalkunte et al. (US 6,118,761); Ghanwani et al. (US 6,633,585); Ramakrishmman (US 6,167,029); Szczepanek et al. (US 6,690668); Kalkunte et al. (US 6,108,306) and Lenoski et al. (US 6,735173).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-

9306.Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Puneet Bhandari
Examiner
Art Unit 2666

PB
***

Seema S. Rao 7/22/05
SEEMA S. RAO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600